

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	1	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/972,207		10/05/2001	Paul Lawrence Bradshaw	SJ09-2001-0097	4759	
46917	7590	05/16/2006		EXAM	EXAMINER	
KONRAD : ATTN: IBM		S & VICTOR, I	CHOUDHURY, AZIZUL Q			
315 SOUTH BEVERLY DRIVE, SUITE 210				ART UNIT	PAPER NUMBER	
BEVERLY I	BEVERLY HILLS, CA 90212			2145		
				DATE MAILED, 05/15/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	09/972,207	BRADSHAW ET AL				
Office Action Summany		DIVADOLIAN EL AE				
Office Action Summary	Examiner	Art Unit				
	Azizul Choudhury	2145				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE STATE OF THE MAILING THE MAIL	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 24 Fe	ebruary 2006.					
,	·—					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	:х рапе Quayle, 1935 С.D. 11, 45	03 O.G. 213.				
Disposition of Claims						
4) ⊠ Claim(s) 1-4,6,16 and 18-34 is/are pending in 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-4,6,16 and 18-34 is/are rejected. 7) ⊠ Claim(s) 33 is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers	,					
9) The specification is objected to by the Examine 10) The drawing(s) filed on <u>05 October 2001</u> is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	(a) accepted or b) \Box objected drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 2145

Detailed Action

This office action is in response to the correspondence received on February 24, 2006.

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

Claim 33 is objected to because of the following informalities: Claim 33 is dependent upon itself. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 16, 18-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang-Knop et al (US Pat No: 6,571,261), hereafter referred to as Wang-Knop.

1. With regards to claim 1, Wang-Knop teaches a storage area network (SAN), comprising: a plurality of storage devices; a plurality of digital data processors,

Art Unit: 2145

each having a file system that effects access to one or more of the storage devices coupled to the SAN (column 5, line 44, Wang-Knop); and a process in communication with the digital data processors, wherein the process responds to a notification from one of the digital data processors requesting for extension of the file system at the requesting digital data processor in accordance with a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring the extension of the file system, and wherein the process adds storage to the file system of the requesting digital processor to implement the request for the extension of the file system according to the attribute in the at least one group of attributes associated with the requesting digital data processor (Wang-Knop's design allows for extension of file system using sub-blocks of memory (column 5, line 61 – column 6, line 10, Wang-Knop). In addition, Wang-Knop's design also features hierarchy (file system structure) information in the form of metadata (column 4,lines 30-49, Wang-Knop)).

2. With regards to claims 2 and 31, Wang-Knop teaches the SAN, wherein the groups of attributes include a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level and wherein the requesting digital data processor is associated with the first and second groups, and wherein the first group is further associated with at least one digital data processor other

Art Unit: 2145

than the selected requesting digital data processor (column 6, line 51 – column 7, line 10, Wang-Knop).

- 3. With regards to claim 3, Wang-Knop's design teaches the SAN, wherein the first group is associated with a first set of file extension attributes defining a default policy for digital data processors associated with that group and wherein the second group is associated with a second set of one or more file extension configuration attributes, wherein a definition of an attribute in the second set overrides a definition for that attribute in the first set wherein the configuration attributes of the second set, taken in conjunction with non-overridden configuration attributes of the first set, define a policy for the second group, wherein the process configures the file extension on behalf of the requesting digital data processor using the attribute in the policy defined for the second group (column 4, lines 30-49 and column 5, lines 15-39, Wang-Knop).
- 4. With regards to claims 4, 18 and 30, Wang-Knop teaches the SAN, wherein the attributes are a member of a set of configuration attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, and a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a

Application/Control Number: 09/972,207

Art Unit: 2145

file system utilization exceeding a threshold since a previous notification (column 4, lines 30-49 and column 5, lines 15-39, Wang-Knop).

Page 5

- 5. With regards to claim 6, Wang-Knop teaches the SAN, wherein a database coupled to the process stores the hierarchical arrangement of the groups of attributes (column 3, line 9, Wang-Knop).
- 6. With regards to claim 16, Wang-Knop teaches a method in a storage area network (SAN) comprising one or more digital data processors and one or more storage devices, each having a file system that effects access to one or more of the storage devices, comprising: defining a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring an extension of the file system (column 4, line 50 column 5, line 4, Wang-Knop); assigning the digital data processors to the groups of attributes; extending the file system of a digital data processor requesting an extension of the file system by adding storage to the file system of the requesting digital data processor according to the attributes in the at least one group of attributes associated with the requesting digital data processor (column 5, line 61 column 6, line 10, Wang-Knop).
- 7. With regards to claim 19, Wang-Knop teaches the method, wherein assigning the digital data processors to the groups further comprises assigning one of the

Art Unit: 2145

digital data processors to the first group and to a third group hierarchically related to the second group at a lower level, the third group inheriting at least a portion of the policy defined for the second group and overriding the reminder of the policy (column 6, line 51 – column 7, line 10, Wang-Knop).

- 8. With regards to claim 20, Wang-Knop teaches the method, wherein assigning the digital data processors to the groups further comprises assigning another one of the digital data processors to the first group and to a third group hierarchically at the same level as the second group, the third group inheriting at least a portion of the policy defined for the first group and overriding the remainder of the policy to define a file extension policy that is at least partially different from the policy defined for the second group (column 4, lines 30-49 and column 5, lines 14-39, Wang-Knop).
- 10. With regards to claim 21, Wang-Knop teaches the method, wherein the groups of attributes include a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level, and wherein the requesting digital data processor is in the first and second groups, and wherein the first group includes at least one digital data processor other than the requesting digital data processor (column 5, lines 14-39, Wang-Knop).

Application/Control Number: 09/972,207

Art Unit: 2145

11. With regards to claims 22, 26 and 32, Wang-Knop teaches the method wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated (column 4, lines 30-49, Wang-Knop).

Page 7

- 12. With regards to claims 23, 27 and 33, Wang-Knop teaches the method wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in the at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels (column 4, lines 30-49 and column 5, lines 14-39, Wang-Knop).
- 13. With regards to claims 24, 28 and 34, Wang-Knop teaches the method wherein at least one group comprises a host group policy defining attributes for configuring, an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy (column 4, lines 30-49 and column 6, lines 35-50, Wang-Knop).
- 14. With regards to claim 25, Wang-Knop teaches the method wherein the first group is associated with a first set of file extension attributes defining a default policy for

Application/Control Number: 09/972,207

Art Unit: 2145

digital data processors associated with that group and wherein the second group is associated with a second set of one or more file extension configuration attributes, wherein a definition of an attribute in the second set overrides a definition for that attribute in the first set, wherein the configuration attributes of the second set, taken in conjunction with non-overridden configuration attributes of the first set, define a policy for the second group, wherein the process configures the file extension on behalf of the requesting digital data processor using the attributes defined for the policy of the second group (column 4, lines 30-49, Wang-Knop).

Page 8

15. With regards to claim 29, Wang-Knop teaches a computer readable medium including a manager program in communication with one or more digital data processors and one or more storage devices, each having a file system that effects access to one or more of the storage devices, wherein the manager program is capable of causing operations, the operations comprising: defining a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring an extension of the file system (column 4, lines 30-49 and column 6, lines 19-50, Wang-Knop); assigning the digital data processors to the groups of attributes; and extending the file system of a digital data processor requesting an extension of the file system by adding storage to the file system of the requesting digital data processor according to the attributes in the group of attributes associated with the

requesting digital data processor (column 5, line 61 – column 6, line 10, Wang-Knop).

Remarks

In lieu of the correspondence received on February 24, 2006, a new search has been performed and more pertinent prior art has been discovered. In light of the new findings, the final rejection has been withdrawn and the current office action has been compiled. The examiner requests the applicant call the examiner upon receipt of this office action to set up an interview to assist in the advancing prosecution of this case.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2145

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC

JASON CARDONE SUPERVISORY PATENT EXAMINER